

IN THE CLAIMS

Claims 12-19 and 30-40 are pending. Claim 12 has been amended. Claims 30-40 are new.

1.-11. (previously cancelled)

12. (currently amended) A method comprising:

providing a first substrate;

predetermining a device placement location for a second substrate to be coupled to said first substrate;

predetermining a flow modifier height at least equal to a distance from a bottom surface of a second substrate used to couple said second substrate to said first substrate, to a top surface of said first substrate that is coupled to said second substrate;

coupling a flow modifier to said first substrate substantially ~~around~~ adjacent to said device placement location and extending to a height substantially equal to said predetermined flow modifier height;

coupling said second substrate to said first substrate at said device placement location;

applying a first molding compound over said second substrate; and

applying a second molding compound between said first substrate and said second substrate, wherein said flow modifier substantially separates a flow of said first molding compound from a flow of said second molding compound.

13. (Original) The method of claim 12 wherein said flow modifier height is a distance approximately between 75 microns and 400 microns.

14. (Original) The method of claim 12 further comprising applying a low pressure over said substrates.

15. (Original) The method of claim 12 wherein said applying the first molding compound over said second substrate and applying said second molding compound between said first substrate and said second substrate happen at substantially the same time.

16. (Original) The method of claim 12 wherein applying said first molding compound over said second substrate happens before applying said second molding compound between said first substrate and said second substrate.

17. (Original) The method of claim 12 wherein applying said first molding compound over said second substrate happens after applying said second molding compound between said first substrate and said second substrate

18. (Original) The method of claim 12 wherein the second substrate has not been coupled to said first substrate before said flow modifier is deposited.

19. (Original) The method of claim 12 wherein said flow modifier is placed substantially around said device placement locations.

20-29. (previously cancelled)

30. (New) The method of claim 12, wherein said flow modifier has predetermined height greater than a distance from a bottom surface of a second substrate used to couple said second substrate to said first substrate that is coupled to said second substrate.

31. (New) The method of claim 12, wherein said first molding compound has the same composition as said second molding compound.

32. (New) The method of claim 12, wherein said first substrate is an integrated circuit die and said second substrate is a package substrate.

33. (New) A method comprising:

providing a first substrate;

predetermining a device placement location for a second substrate to be coupled to said first substrate;

predetermining a flow modifier height at least equal to a distance from a bottom surface of a second substrate used to couple said second substrate to said first substrate, to a top surface of said first substrate that is coupled to said second substrate;

coupling a flow modifier to said first substrate substantially adjacent to said device placement location and extending to a height substantially equal to said predetermined flow modifier height;

coupling said second substrate to said first substrate at said device placement location;

and

introducing a first molding compound over said second substrate and a second molding compound between said first substrate and said second substrate at substantially the same time.

34. (New) The method of claim 33 wherein said flow modifier has predetermined height greater than a distance from a bottom surface of a second substrate used to couple said second substrate to said first substrate that is coupled to said second substrate.

35. (New) The method of claim 33 wherein said first molding compound has the same composition as said second molding compound.

36. (New) A method comprising:
providing a substrate having a die placement location;
forming a flow modifier substantially adjacent to a said die placement location;
coupling a surface of a die to a surface of said substrate at said die placement location,
wherein said coupling forms a gap between the coupled surfaces having a height less than that of said flow modifier;
overmolding said die with a first mold flow; and
underfilling said gap between said die and said substrate with a second mold flow,
wherein said second mold flow is substantially separated from said first mold flow by said flow modifier.

37. (New) The method of claim 36, wherein said first mold flow and said second mold flow are initiated at substantially the same time.

38. (New) The method of claim 36, wherein said first mold flow has a substantially different flow speed than that of said second mold flow.

39. (New) The method of claim 36, wherein said overmolding is performed before said underfilling.

40. (New) The method of claim 36, wherein said overmolding is performed with the same molding compound as said underfilling.